



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY  
GOVERNOR

LYNDO TIPPETT  
SECRETARY

**MEMORANDUM TO:** Project Engineers  
Project Design Engineers  
**FROM:** Timothy V. Rountree, P. E.  
State Bridge Design Engineer  
**DATE:** September 12, 2001  
**SUBJECT:** STANDARD NOTES

To complement the 2002 Standard Specifications, a few notes in the Design Manual have been revised.

On page 5-4 of the Design Manual, replace the third note with the following two notes:

***Fabricated metal stay-in-place forms or removable forms may be used in lieu of prestressed concrete panels in accordance with Article 420-3 of the Standard Specifications.*** (when plans are detailed with panels; not to be used at corrosive sites)

***Removable forms may be used in lieu of metal stay-in-place forms in accordance with Article 420-3 of the Standard Specifications.*** (when plans are detailed with MSIP forms)

Replace Note #9 on page 12-14 of the Design Manual with the following:

***The concrete in the (columns, bent caps, pile caps, footings, and/or piles) of Bent No. \_\_\_\_ shall contain silica fume. Silica Fume shall be substituted for 5% of the portland cement by weight. If the option of Article 1024-1 of the Standard Specifications to partially substitute Class F fly ash for portland cement is exercised, then the rate of fly ash substitution shall be reduced to 1.0 lb (1.0 kg) of fly ash per 1.0 lb (1.0 kg) of cement. No payment will be made for this substitution as it is considered incidental to the various pay items.***

Replace the last note on page 12-14 of the Design Manual with the following:

***Steel piles for fender systems shall contain 0.2% copper and be painted in accordance with system 2 of Article 442-7 of the Standard Specifications. For Painting Steel Piles, see Special Provisions.***

In addition, replace the second note in the August 1, 2000 Culvert Extensions memo with the following:

***Dowels shall be used to connect the culvert extension to the existing culvert as shown. For note regarding setting of dowels, see Sheet SN(SNSM).***

In addition, the following notes were revised to reference the Standard Specifications instead of a Special

Provision.

On page 6-33 of the Design Manual, replace the first note with the following:

***Tension on the AASHTO M164 bolts shall be calibrated using direct tension indicator washers in accordance with Article 440-10 of the Standard Specifications.***

Replace the second and third notes on page 6-33 of the Design Manual with the following:

***A Charpy V-notch test is required on all beam sections, cover plates, and splice plates as shown on the plans and in accordance with Article 1072-9 of the Standard Specifications.***

***A Charpy V-notch test is required for web plates, bottom flange plates, bottom flange splice plates and web splice plates (if used) for all girders and in accordance with Article 1072-9 of the Standard Specifications.***

Due to the new guardrail transition details, the note on page 12-2 of the Design Manual will no longer be used.

This policy is effective with the January 2002 letting. The Design Manual will be updated at a later date.

TVR/KJA



---

[Back to Structures Main Page](#)

Last Updated: 9/12/2001 by:Randy Bissette

[E-mail Structure Design](#)